

REMARKS

This communication is in response to the Final Office Action of June 12, 2008.

Claim 1 is rejected under 37 U.S.C. 103(a) as being unpatentable over Slezak (U.S. 6,647,119 B1), in view of Sibbald (U.S. 6,498,857 B1), and Shaw et al. (U.S. 6,016,515). Claims 2, 10, 17 and 18 are rejected under 37 U.S.C. 103(a) as being unpatentable over Slezak (U.S. 6,647,119 B1), in view of Sibbald (U.S. 6,498,857 B1), and Shaw et al. (U.S. 6,016,515), and further in view of Puryear et al. (U.S. 2004/0064210 A1), and Li et al. (U.S. 5,860,060).

Applicant has amended the claims to describe with greater particularity aspects of the claimed invention. In particular, Applicant has amended the claims to include a limitation that a virtual device has at least one corresponding speaker in a group of speakers in different locations. Applicant has also clarified that the audio mixing is performed to permit two or more open application to have audio outputs assigned to a common speaker.

It is respectfully submitted that the claimed invention is patentable over the prior art. One aspect of the claimed invention is that the virtual devices can be used to make an arbitrary assignment of speakers with the system performing any required mixing. As an illustrative example, a home-owner may have multiple speakers located in different rooms of their house. The home-owner may desire to assign a game to a pair of speakers located near a PC, assign music to quadraphonic speakers, or assign a video player to speakers facing a couch. The use of virtual devices facilitates the user making an arbitrary assignment of speakers for each application. Additionally, since any required mixing is performed the system will support two or more open applications even if the selection of virtual devices for the applications ends up in the sharing of one or more common speakers. That is, there may be an overlap in the speakers assigned to different virtual devices.

In contrast, the prior art does not teach or suggest the elements of amended claim 1. SLEZAK deals with providing spatial audio cues. An end user can't make an assignment of speakers in the manner of the claimed invention; additionally SLEZAK is incompatible with mixing (which would destroy the spatial location characteristics). SIBBALD deals with the reproduction of three-dimensional sound sources and also does not deal with using virtual devices to support a user selecting a speaker assignment and performing any required mixing to support two or more open applications. SHAW merely deals with a filter in a driver. In short, the

Attorney Docket No.: NVID-065/00US

Application No.: 10/642,678

Page 7

combination of references fails to teach all of the elements of the claimed invention. The other independent are allowable on at least the same basis.

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is now in condition for allowance. The Examiner is invited to contact the undersigned if there are any residual issues that can be resolved through a telephone call.

The Commissioner is hereby authorized to charge any appropriate fees to Deposit Account No. 50-1283.

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EVG/dlh